

Claims

- [1] A pumping device of a shoe (100) comprising:
a cushion body (110) formed inside a sole of the shoe (110) and having front and back air chambers (120 and 130) formed therein in such a manner as to be disposed at the front and back portions thereof;
an automatic pump (140) mounted adjacent to the back air chamber (130) in such a manner as to communicate with the back air chamber (130) and having a height (H2) higher than a height (H1) of the back air chamber (130);
a suction valve (150) and a check valve (160) mounted at the front and back sides of the automatic pump (140) respectively; and
a pressure adjusting valve (170) formed at a connecting valve (125) for connecting the back air chamber (130) with the front air chamber (120).
- [2] The pumping device according to claim 1, wherein the automatic pump (140) has a support plate (180) disposed on the top and bottom sides thereof, respectively.
- [3] The pumping device according to claim 1, wherein the automatic pump (140) has a support body (190) disposed at the inside thereof.
- [4] The pumping device according to claim 3, wherein the support body (190) has a generally conical shape.
- [5] The pumping device according to claim 3, wherein the support body (190) has a restoring spring (195) disposed at the inside thereof, to be in contact with the top and bottom sides of the interior of the automatic pump (140), at the top and bottom sides thereof.